UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

Explanation of Significant Difference (ESD # 1)

to

March 1998 Amendment # 1 to the Record of Decision

J. H. Baxter Superfund Site
Weed, California

September 2001

I. Introduction

The J. H. Baxter Superfund Site ("Site") is located in Weed, California. The Site was listed on the National Priorities List ("NPL") on October 4, 1989. The United States Environmental Protection Agency, Region IX ("EPA") issued the Record of Decision ("ROD") on September 25, 1990, on which the State of California gave its concurrence. As a result of studies undertaken to design the remedy selected in the 1990 ROD, EPA conducted a Focused Feasibility Study ("FFS") to reevaluate the cleanup requirements for groundwater and soils contaminated with dense non-aqueous phase liquids ("DNAPLs"). On the basis of the FFS, EPA concluded that it was technically impracticable to achieve the 1990 ROD cleanup standards for groundwater within the DNAPL zone. The decision by EPA on the revised remedial action is embodied in the Amended ROD, dated March 27, 1998, on which the State of California concurred. EPA is the lead agency for the Site and the California Department of Toxic Substances Control ("DTSC") and the North Coast Regional Water Quality Control Board ("RWQCB") are the support agencies.

This Explanation of Significant Difference ("ESD") modifies the remedial action selected by EPA in the Amended ROD. This ESD was developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA") section 117(c), as amended by the Superfund Amendments and Reauthorization Act of 1986 ("SARA"), the National Oil and Hazardous Substances Contingency Plan ("NCP") section 300.435(c)(2)(I), and "A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents," July 1999. This ESD is based on information contained in the Administrative Record for the Site.

This ESD modifies the treatment standard set in the Amended ROD for non-carcinogenic polynuclear aromatic hydrocarbons ("ncPAHs") for soils placed in the Resource Conservation and Recovery Act ("RCRA")-equivalent cell. The treatment standard for such soils was designated as 1 mg/l (TCLP) in the ROD and Amended ROD. This ESD changes that standard to 2.6 mg/l (TCLP). Pursuant to the Amended ROD, the RCRA-equivalent cell was designated as a Corrective Action Management Unit ("CAMU"). Soils which have been treated and have reached a level of ncPAHs of 2.6 mg/l (TCLP) shall now be placed in the CAMU without further treatment.

This ESD will become part of the Administrative Record File (NCP 300.825(a)(2)), and will be available for review from 8:00am to 5:00pm Monday through Friday, excluding holidays, at EPA Region IX Superfund Records Center, 95 Hawthorne St., San Francisco, CA. The Administrative Record File is also available for review at the College of the Siskiyous Library, 800 College Avenue, Weed, CA (530-938-5331) from 8:00am to 8:00pm Monday through Thursday, 8:00am to 4:00pm on Friday, and 12:00 to 4:00pm on some Sundays.

II Summary of Site History, Contamination Problems, and Selected Remedy

Waste disposal, handling, and discharge practices over the 50 years of plant operations at the Site have resulted in soil, groundwater, and surface water contamination by chemicals associated with wood treatment operations. Wastes generated at the Site include retort drippings, tank and retort sludges, process water, wastewater, drying area drippings, storage area drippings, empty containers, and spilled raw preservative compounds. Prior to 1983, when the facility was ordered to cease its waste disposal practices by the North Coast RWQCB, waste management involved on-site disposal and discharge, spray irrigation of waste water on Site, storage in ponds and tanks on site, and possible disposal of sludges into a local landfill.

Remedial investigations at the Site began in 1983 at the request of the North Coast RWQCB. Investigation results at that time indicated that Site soils, surface water runoff, and groundwater contained elevated levels of arsenic, creosote, and pentachlorophenols ("PCPs"). EPA initiated a Remedial Investigation ("RI") of the Site in 1987 and released the RI in 1989. EPA then performed a Feasibility Study ("FS") based on the RI. The 1990 FS addressed all impacted media at the Site, including surface soils, subsurface soils, groundwater, surface water, and sediment. EPA issued the ROD in 1990 based on the results of the FS.

The major components of the selected remedy included the following :

- Extraction of the contaminated groundwater, followed by biological treatment and chemical precipitation, polishing, and disposal. The preferred disposal method for the treated groundwater was reuse on the Roseburg log decks. Other disposal options included: re-injection to groundwater, release to subsurface drains or trenches, industrial process use, and/or disposal to percolation ponds.
- Excavation of the organic contaminated soils and biological treatment in lined treatment cells, followed by on-site disposal in a lined RCRA-equivalent cell.
- Excavation of the inorganic soils and chemical fixation followed by on-site disposal in lined treatment cells for treated soils designated as hazardous waste.
- Excavation of the combined organic/inorganic soils, biological treatment in treatment cells, chemical fixation, and on-site disposal into a lined RCRA-equivalent cell.

After the ROD was issued, a significant amount of additional data was obtained through further investigation and characterization work conducted at the Site. This information contributed to a better understanding of the extent of contamination, especially the DNAPLs in the subsurface. These reports found significant increases in the estimated volume of contaminated soil over the ROD estimate. The ROD estimated that 41,000 cubic yards of contaminated soil would be subject to cleanup, while the post-ROD investigations estimated that there were 201,500 cubic yards of impacted soil in the unsaturated zone.

The Amended ROD, signed in 1998, documents a waiver of the groundwater cleanup standards set forth in the 1990 ROD, based on the technical impracticability of the ROD cleanup standards for groundwater in the DNAPL Zone. The components of the ROD amendment include:

- Construction of a slurry wall to contain DNAPLs in the vadose zone, and related activities
- Bioventing of Area B soils (completed prior to slurry wall construction)

- Construction of a RCRA-equivalent disposal cell, and related activities

In addition, the Amended ROD designated the RCRA-equivalent disposal cell as a CAMU.

III Description of the Significant Difference and the Basis for that Difference

The 1990 ROD addressed contamination by non-carcinogenic polynuclear aromatic hydrocarbons ("ncPAHs"), which include naphthalene, 2-methylnaphthalene, acenaphthylene, acenaphthene, dibenzofuran, flourene, phenanthrene, anthracene, flouranthene, pyrene, and benzo- (g, h, i) perylene. The 1990 ROD identified ncPAHs as contaminants of less concern than arsenic, carcinogenic PAHs, pentachlorophenol, and dioxins. The ROD set a treatment standard of 1 mg/l (TCLP) for ncPAHs in soils. The Amended ROD retained this standard for ncPAHs in soils placed in the RCRA-equivalent cell and prescribed for soils to be treated in a landfarming unit prior to disposal in the cell.

The levels of ncPAHs in Component 3A soils (see Table 6-1 of the Amended ROD) have been successfully reduced through treatment, but have not reached 1 mg/l (TCLP). Continued treatment is unlikely to significantly reduce ncPAH levels in the Component 3A soils. Therefore, this ESD changes the treatment standard for ncPAHs in soils placed in the RCRA-equivalent cell to 2.6 mg/l (TCLP). As a result, all Component 3A soils, in which ncPAH levels have been reduced to 2.6 mg/l (TCLP) by treatment, shall be disposed of in the RCRA-equivalent disposal cell. The treatment standard listed in Table 4-2 of the Amended ROD for soils placed in RCRA-equivalent cell for ncPAHs is changed to "2.6 mg/l (TCLP)."

This ESD continues to satisfy all of the criteria for designation of the RCRA-equivalent disposal cell as a CAMU. In particular, the CAMU must enable the use of treatment technologies to enhance long-term effectiveness of corrective actions by reducing the toxicity, mobility or volume of wastes. Under the Amended ROD as well as this ESD, the use of the selected remedial actions of bioremediation and stabilization has reduced the toxicity and mobility of the wastes to be stored in the RCRA-equivalent disposal cell CAMU at the Site (see Table 8-10 of the Amended ROD).

This ESD will enhance the short-term effectiveness of the remedy for the Site by reducing the amount of time that the contaminated soils will be exposed during treatment. If the landfarm remains open for another winter, there will be an increased risk of spillage of rain water from the storm drain system. In addition, all waste water caught in the system must be treated. The ESD will also limit short-term exposure to workers and the community, and eliminate the odors at the site associated with the landfarm and treatment of the soils. Finally, the ESD reduces the amount of time that the RCRA-equivalent cell will remain open; the cell already has soils in it and will be permanently closed once the Component 3A soils are placed inside the CAMU. The permanent cap of the CAMU is preferable to the temporary cover because the permanent cap includes a leachate collection system, while the temporary one does not.

Once the Component 3A soils are placed inside the CAMU, the remedy will remain protective of human health and the environment. The CAMU effectively eliminates any exposure pathways. Passive biodegradation of the soils is expected to occur within the CAMU, which will further reduce ncPAH levels. In addition, the potential for leachate generation in the RCRA-equivalent

disposal cell is minimal, and if any is generated, the containment system of the cell would act to contain the leachate, as well as permitting detection and removal of such leachate. This ESD's modification of the treatment standard further enhances the protectiveness of the remedy described in the Amended ROD.

IV Support Agency Comments

DTSC and the RWQCB concur with this ESD.

V Affirmation of the Statutory Determinations

Considering the changes that have been made to the selected remedy, EPA believes that the revised remedy remains protective of human health and the environment, and is cost effective. The revised remedy complies with federal and state requirements identified in the Amended ROD as applicable, relevant and appropriate requirements ("ARARs") and satisfies section 121 of CERCLA.

VI Public Participation Compliance

The public participation requirements set out in the NCP, section 300.435(c)(2)(I) will be met by publication of notice in the *Weed Press* that the ESD has been signed and that the contents of the Administrative Record File are available. Such notice will include a brief description of the ESD.

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9-13-01
Date